

We Claim:

1. A film made from an ethylene polymer composition, wherein the composition comprises from about 10 percent (by weight of the total composition) to about 95 percent (by weight of the total composition) of :

- 5 (A) at least one homogeneously branched substantially linear ethylene/ α -olefin interpolymer having:
- (i) a density from about 0.89 grams/cubic centimeter (g/cm^3) to about $0.92\ g/cm^3$,
 - (ii) a molecular weight distribution (M_w/M_n) from
- 10 about 1.8 to about 2.8,
- (iii) a melt index (I_2) from about 0.001 grams/10 minutes ($g/10\ min$) to about $10\ g/10\ min$,
 - (iv) no linear polymer fraction, and
 - (v) a single melting peak as measured using
- 15 differential scanning calorimetry; and
- (B) from about 5 percent (by weight of the total composition) to about 90 percent (by weight of the total composition) of at least one heterogeneously branched ethylene polymer having a density from about $0.93\ g/cm^3$ to about $0.965\ g/cm^3$.
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- 25 2. The film of claim 1 wherein the homogeneously branched substantially linear ethylene/ α -olefin interpolymer has a slope of strain hardening coefficient greater than or equal to about 1.3.
- 30 3. The film of claim 1 wherein the heterogeneously branched ethylene polymer is an interpolymer of ethylene with at least one C_3-C_{20} α -olefin.
4. The film of claim 1 wherein the homogeneously branched substantially linear ethylene/ α -olefin interpolymer is an interpolymer of ethylene with at least one C_3-C_{20} α -olefin.

5. The film of claim 1 wherein the homogeneously branched substantially linear ethylene/α-olefin interpolymer is a copolymer of ethylene and a C₃-C₂₀ α-olefin.

5 6. The film of claim 5 wherein the homogeneously branched substantially linear ethylene/α-olefin copolymer is a copolymer of ethylene and 1-octene.

10 7. The film of claim 3 wherein the heterogeneously branched ethylene polymer is a copolymer of ethylene and a C₃-C₂₀ α-olefin.

15 8. The film of claim 7 wherein the heterogeneously branched ethylene polymer is a copolymer of ethylene and 1-octene.

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15 9. A film made from an ethylene polymer composition, wherein the composition comprises from about 10 percent (by weight of the total composition) to about 95 percent (by weight of the total composition) of :

20 (A) at least one homogeneously branched linear ethylene/α-olefin interpolymer having:

25 (i) a density from about 0.89 grams/cubic centimeter (g/cm³) to about 0.92 g/cm³,

25 (ii) a molecular weight distribution (M_w/M_n) from

25 about 1.8 to about 2.8,

30 (iii) a melt index (I₂) from about 0.001 grams/10 minutes (g/10 min) to about 10 g/10 min,

30 (iv) no linear polymer fraction, and

30 (v) a single melting peak as measured using differential scanning calorimetry; and

30 (B) from about 5 percent (by weight of the total composition) to about 90 percent (by weight of the total composition) of at least one heterogeneously branched ethylene polymer having a density from about 0.93 g/cm³ to about 0.965 g/cm³.

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10. The film of claim 9 wherein the homogeneously branched linear ethylene polymer has a slope of strain hardening coefficient greater than or equal to about 1.3.

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11. The film of claim 9 wherein the heterogeneously branched ethylene polymer is an interpolymer of ethylene with at least one C₃-C₂₀ α-olefin.

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12. The film of claim 9 wherein the homogeneously branched linear ethylene/α-olefin interpolymer is an interpolymer of ethylene with at least one C₃-C₂₀ α-olefin.

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13. The film of claim 9 wherein the homogeneously branched linear ethylene/α-olefin interpolymer is a copolymer of ethylene and a C₃-C₂₀ α-olefin.

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14. The film of claim 13 wherein the homogeneously branched linear ethylene/α-olefin copolymer is a copolymer of ethylene and 1-octene.

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15. The film of claim 11 wherein the heterogeneously branched ethylene polymer is a copolymer of ethylene and a C₃-C₂₀ α-olefin.

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16. The film of claim 15 wherein the heterogeneously branched ethylene polymer is a copolymer of ethylene and 1-octene.

17. In a composition comprising at least one homogeneously branched ethylene/α-olefin interpolymer and at least one heterogeneously branched ethylene/α-olefin interpolymer, the improvement comprising incorporating into the composition from about 10 percent (by weight of the total composition) to about 95 percent

(by weight of the total composition) of at least one homogeneously branched substantially linear ethylene/α-olefin interpolymer having:

- (i) a density from about 0.89 grams/cubic centimeter (g/cm³) to about 0.92 g/cm³,
- 5 (ii) a molecular weight distribution (M_w/M_n) from about 1.8 to about 2.8,
- (iii) a melt index (I_2) from about 0.001 grams/10 minutes (g/10 min) to about 10 g/10 min,
- 10 (iv) no linear polymer fraction, and
- (v) a single melting peak as measured using differential scanning calorimetry.

18. The improvement of claim 17 wherein the homogeneously branched substantially linear ethylene/α-olefin

15 interpolymer has a slope of strain/hardening coefficient greater than or equal to about 1.3.

19. The improvement of claim 17 wherein the homogeneously branched substantially linear ethylene/α-olefin

20 interpolymer is an interpolymer of ethylene with at least one C₃-C₂₀ α-olefin.

20. The improvement of claim 17 wherein the homogeneously branched substantially linear ethylene/α-olefin

25 interpolymer is a copolymer of ethylene and a C₃-C₂₀ α-olefin.

21. The improvement of claim 20 wherein the homogeneously branched substantially linear ethylene/α-olefin interpolymer is a copolymer of ethylene and 1-octene.

30 22. The improvement of claim 17 wherein the heterogeneously branched ethylene polymer is a copolymer of ethylene and a C₃-C₂₀ α-olefin.

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23. The improvement of claim 22 wherein the heterogeneously branched ethylene polymer is a copolymer of ethylene and 1-octene.

- 5 24. In a composition comprising at least one homogeneously branched ethylene/α-olefin interpolymer and at least one heterogeneously branched ethylene/α-olefin interpolymer, the improvement comprising incorporating into the composition from about 10 percent (by weight of the total composition) to about 95 percent
10 (by weight of the total composition) of at least one homogeneously branched linear ethylene/α-olefin interpolymer having:
 (i) a density from about 0.89 grams/cubic centimeter (g/cm³) to about 0.92 g/cm³,
 (ii) a molecular weight distribution (M_w/M_n) from
15 about 1.8 to about 2.8,
 (iii) a melt index (I_2) from about 0.001 grams/10 minutes (g/10 min) to about 10 g/10 min,
 (iv) no linear polymer fraction, and
 (v) a single melting peak as measured using
20 differential scanning calorimetry.
- 25 25. The improvement of claim 24 wherein the homogeneously branched linear ethylene/α-olefin interpolymer has a slope of strain hardening coefficient greater than or equal to about 1.3.
- 26 26. The improvement of claim 24 wherein the homogeneously branched linear ethylene/α-olefin interpolymer is an interpolymer of ethylene with at least one C₃-C₂₀ α-olefin.
- 30 27. The improvement of claim 24 wherein the homogeneously branched linear ethylene/α-olefin interpolymer is a copolymer of ethylene and a C₃-C₂₀ α-olefin.

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28. The improvement of claim 27 wherein the homogeneously branched linear ethylene/α-olefin interpolymer is a copolymer of ethylene and 1-octene.
- 5 29. The improvement of claim 24 wherein the heterogeneously branched ethylene polymer is a copolymer of ethylene and a C₃-C₂₀ α-olefin.
- 10 30. The improvement of claim 29 wherein the heterogeneously branched ethylene polymer is a copolymer of ethylene and 1-octene.

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